Appl. No. 10/823,098

Amdt. dated 11/06/2009

Reply to Office action of 09/09/2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

1.(currently amended) A method to dissipate conduct heat generated by a coil located

within a structure, that is on to a single substrate, when there is at least one thermally

insulating layer between said coil and said substrate, comprising:

forming a thermally conductive pedestal that originates at said substrate, and

extends upwards therefrom; [[and]]

forming a layer of thermally conductive material that overlies said coil and

extends beyond said coil to overlie said pedestal; and

thermally connect[[s]]ing said coil to said substrate through said pedestal,

thereby providing an unbroken thermal path between said coil and said substrate.

2.(previously presented) The method of claim 1 wherein said layer of thermally

conductive material and said conductive pedestal have a thermal conductivity between

100 and 400 W/m.K.

3. (previously presented) The method of claim 1 wherein said layer of thermally

conductive material is selected from the group consisting of copper, tungsten,

molybdenum, silicon, ruthenium, rhodium, and iridium.

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4. (previously presented) The method of claim 1 wherein said layer of thermally

conductive material has a thickness between 1 and 2.5 microns.

5. (previously presented) The method of claim 1 wherein said pedestal has a cross-

sectional area that is between 10,000 and 15,000 sq. microns.

6. (previously presented) The method of claim 1 wherein said coil generates heat at a

rate between 4 and 15 milliwatts.

7-24. Canceled

25. (currently amended) A heat extractor for a structure that includes a coil, [[and]] a

single substrate, and at least one thermally insulating layer between said coil and said

substrate, comprising:

a thermally conductive pedestal that originates at said substrate and extends

upwards therefrom; [[and]]

a layer of thermally conductive material that that overlies said coil and extends

beyond said coil to overlie said pedestal; and

thermally connects a thermal connection between said pedestal and [[to]] said

coil, thereby providing whereby there is an unbroken thermal path between said coil and

said substrate.

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26. (previously presented) The heat extractor described in claim 25 wherein said layer

of thermally conductive material and said conductive pedestal have a thermal

conductivity between 100 and 400 W/m.K.

27. (previously presented) The heat extractor described in claim 25 wherein said layer

of thermally conductive material is selected from the group consisting of copper,

tungsten, molybdenum, silicon, ruthenium, rhodium, and iridium.

28. (previously presented) The heat extractor described in claim 25 wherein said layer

of thermally conductive material has a thickness between 1 and 2.5 microns.

29. (previously presented) The heat extractor described in claim 25 wherein said

pedestal has a cross-sectional area that is between 10,000 and 15,000 sq. microns.

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